



Vitrium DRM Settings

For Vitrium Security v8.2.1 and JSON Server v2/v3 Specification

Updated: March 16, 2021
Document Revision: 1.01



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Document Revisions

Revision Number	Reason	Date
1.00	Initial document released	June 22, 2020
1.01	Added notes about Version Unique API DRM settings	March 16, 2021



Vitrium Security Overview

Vitrium Security is a content security and digital rights management (DRM) solution for organizations who wish to control, protect, control, and track their confidential, sensitive or revenue-generating documents and images.



Admin User Interface (UI) DRM Settings (pre-v.8.3.0)

+ Add DRM Policy



Policy Name *

1

Start Date Immediate



2



Expiry Date Not Set



Never



3



Expiry After First Unlock Not Set



Unlimited



4

days



Offline Access Not Set



Unlimited



5

days



Total limit

PDF and Browser Not Set



Unlimited

6.a



Individual limit

See items 6.b and 6.c for "Individual Limit"

Library or Account Limit Not Set



Unlimited



7



Download To Print Limit Not Set



Unlimited



8



Web Browser Print Limit Not Set



Unlimited



9



Download source file Not Set



Allow



10

Content Open Limit Not Set



Unlimited



11



Location restrictions

12



Location permits

13



IP Address Limit



Not Set



Unlimited



14



Allowed IP Addresses

15



* indicates a required field

✓ SAVE & EXIT

Total limit

PDF Not Set



Unlimited

6.b



Individual limit

Browser Not Set



Unlimited

6.c





API AccessPolicy and WebViewerDocPolicyOverride Values (pre-v.8.3.0)

The following table provides the **AccessPolicy** and optional **WebViewerDocPolicyOverride** settings and values that can be used in a JSON response. It is recommended that DRM settings or AccessPolicy be managed in only one endpoint and specifically, that they be returned in the **Authorize** endpoint response.

Item #	Attributes	Description	Definition of Values
1	Policy Name	String describing the DRM Setting	
2	StartDate	The start date of the DRM policy. By default, a null means the policy is in effect immediately. Setting a future date is useful for subscription-based policies.	null: immediate
3	Expiry ⁷⁸	Last date in which the user can access a secured document	null: unlimited 1900-01-01: value not defined
4	RelativeExpiryInDays ⁸⁹	Number of days the user can unlock a document after the first unlock session	null: unlimited -1: value not defined
5	OfflineDurationinDays ⁷⁹	Number of days the user can view the document in offline mode	null: unlimited -1: value not defined
6.a	ComputersMax ⁴	Total number of applications (Adobe PDF viewers and web browsers) that the user can unlock a document with ***IMPORTANT: review the footnote below***	null: unlimited -1: value not defined
6.b	PdfLimit ⁴	Total number of Adobe PDF viewers that a user can unlock the protected PDF document with ***IMPORTANT: review the footnote below***	null: unlimited -1: value not defined
6.b	BrowserLimit ⁴	Total number of unique web browsers that a user can unlock the secured web document with ***IMPORTANT: review the footnote below***	null: unlimited -1: value not defined
7	DocumentLimit	Number of documents that the user can unlock (aka Library or Account)	null: unlimited -1: value not defined
8	PrintLimit	Number of times the user can download a printable copy of a document (AKA Download to Print). Only applies to the Vitrium Webviewer toolbar.	null: unlimited -1: value not defined
9	WebPrintLimit	Number of times the user can print a copy of the web document in a browser	null: unlimited -1: value not defined
10	AllowDownloadSourceFile	Allow user to download the original unprotected source file	null: not enabled True: allowed
11	OpenLimit	Number of times the user can unlock a document after the first unlock session	null: unlimited -1: value not defined
12	LocationRestrictions ⁵	Deny list countries, Canadian Provinces, or USA States. Users in these areas would not have access to the content.	null: not defined
13	LocationPermits ⁵	Allow list countries, Canadian Provinces, or USA States. Only users in these areas would have access to the content.	null: not defined



14	IpAddressesMax	Number of IP addresses that could be used to unlock a document	null: unlimited -1: value not defined
15	IgnoredIpAddresses ⁶	Range of IP addresses that could be used to unlock a document. The IP address defined here will not count against the IpAddressesMax value.	null: not defined

⁴ ComputersMax and PdfLimit / BrowserLimit are mutually exclusive. When setting ComputerMax, you have to set both PdfLimit and BrowserLimit to "-1" otherwise you will have confusing results. Likewise, if setting PdfLimit or BrowserLimit, then set ComputerMax to "-1".

⁵ LocationRestrictions and LocationPermits is based on GeoIP lookup. Valid values are ISO 3166 international standard Alpha-2 codes and/or Province or State 2-character codes. An example might be: ["CA-QC","CA-ON","US","CZ","IR","CN"]

⁶ IgnoredIpAddresses can contain a single IP address, a subnet range, or multiple combinations of both. IPv4 is currently supported and IPv6 support will be available in the near future. A mix of both IPv4 and IPv6 values can co-exist. IPv4 sample syntax would be:

xxx.xxx.xxx.xxx,xxx.xxx.xxx.xxx-xxx.xxx.xxx.xxx where a subnet range is delimited by a dash and each IP subnet is separated by a comma.

⁷ Expiry vs OfflineDurationInDays. Expiry takes precedence. Offline days is set to lessor of (expiry, offline). Offline date is based on last unlock date.

⁸ Expiry vs RelativeExpiryInDays. Expiry takes precedence. Relative is set to lessor of (expiry, relative). Relative date is based on first unlock date.

⁹ OfflineDurationInDays vs RelativeExpiryInDays. Offline Rules. Offline is set to lessor of (offline, relative). Offline date is based on last unlock date. Relative date is based on first unlock date.

In addition to the above DRM settings in the Vitrium Admin UI, an Enterprise customer also has the ability to further override some content and print settings but only in the WebViewer (not in the Protected PDF files) and only if the noted feature has been enabled on your account.

The following settings can be included in the **WebViewerDocPolicyOverride** section of a JSON server RESTful response and, if you're planning on using any one (1) of these hidden permissions, you must provide all using either a value of True or False:

Attributes	Description	Definition of Values
AllowCopy	Enable copy/paste function	False: not enabled True: allowed
AllowPrint	Enable the "Download to Print" toolbar button. This will download a Protected PDF with a 30-minute, one device limit and with printing enabled.	False: not enabled True: allowed
AllowWebPrint	Enable the "Print" toolbar button	False: not enabled True: allowed
DisableBookmarks	Disable/hide the Bookmark feature from the left side column	False: not enabled True: hidden
DisablePageRangePrint	Disable the print "all" and "Page range" options in the print dialog box. Only "Current page" will be enabled.	False: not enabled True: enabled
DisableSearch	Disable the Search toolbar button	False: not enabled True: hidden



Admin User Interface (UI) DRM Settings (post-v.8.3.0)

General Settings | Advanced Settings

+ Add DRM Policy ✕

Policy Name *

Start Date Immediate 2 ?

Expiry Date Never 3 ?

Expiry After First Unlock Unlimited 4 days ?

Offline Access Unlimited 5 days ?

PDF (Adobe) Limit Unlimited 6 ?

Web Browser Limit Unlimited 7

* indicates a required field

✓ SAVE & EXIT

General Settings | **Advanced Settings**

+ Add DRM Policy ✕

Library or Account Limit Unlimited 8 ?

Download To Print Limit Unlimited 9 ?

Web Browser Print Limit Unlimited 10 ?

Allow Downloading Source File ? 11

Content Open Limit Unlimited 12 ?

IP Address Limit Unlimited 13 ?

Allowed IP Addresses ?

Location Restrictions ?

Location Permits ?

✓ SAVE & EXIT



API AccessPolicy and WebViewDocPolicyOverride Values (post-v.8.3.0)

The following table provides the **AccessPolicy** and optional **WebViewDocPolicyOverride** settings and values that can be used in a JSON response. It is recommended that DRM settings or AccessPolicy be managed in only one endpoint and specifically, that they be returned in the **Authorize** endpoint response.

Item #	Attributes (in API)	Description	Definition of Values
1	Policy Name	String describing the DRM Setting	
2	StartDate	The start date of the DRM policy. By default, a null means the policy is in effect immediately. Setting a future date is useful for subscription-based policies.	null: immediate
3	Expiry ⁷⁸	Last date in which the user can access a secured document.	null: never expires
4	RelativeExpiryInDays ⁸⁹	Number of days the user can unlock a document after the first unlock session	null: unlimited
5	OfflineDurationinDays ⁷⁹	Number of days the user can view the document in offline mode	null: unlimited
6	PdfLimit ⁴	Total number of Adobe PDF viewers that a user can unlock the protected PDF document with	null: unlimited
7	BrowserLimit ⁴	Total number of unique web browsers that a user can unlock the secured web document with	null: unlimited
8	DocumentLimit	Number of documents that the user can unlock (aka Library or Account)	null: unlimited -1: value not defined
9	PrintLimit	Number of times the user can download a printable copy of a document (AKA Download to Print). Only applies to the Vitrium Webviewer toolbar. A value of 0 will hide the toolbar icon.	null: unlimited
10	WebPrintLimit	Number of times the user can print a copy of the web document in a browser. A value of 0 will hide the toolbar icon.	null: unlimited
11	AllowDownloadSourceFile	Allow user to download the original unprotected source file	True: allowed False: not allowed
13	OpenLimit	Number of times the user can unlock a document after the first unlock session	null: unlimited
13	IpAddressesMax	Number of IP addresses that could be used to unlock a document	null: unlimited
14	IgnoredIpAddresses ⁶	Range of IP addresses that could be used to unlock a document. The IP address defined here will not count against the IpAddressesMax value.	Empty string: no rule defined
15	LocationRestrictions ⁵	Deny list countries, Canadian Provinces, or USA States. Users in these areas would not have access to the content.	Empty array: no rule defined
16	LocationPermits ⁵	Allow list countries, Canadian Provinces, or USA States. Only users in these areas would have access to the content.	Empty array: no rule defined



⁴ ComputersMax and PdfLimit / BrowserLimit are mutually exclusive. When setting ComputerMax, you have to set both PdfLimit and BrowserLimit to "-1" otherwise you will have confusing results. Likewise, if setting PdfLimit or BrowserLimit, then set ComputerMax to "-1".

⁵ LocationRestrictions and LocationPermits is based on GeoIP lookup. Valid values are ISO 3166 international standard Alpha-2 codes and/or Province or State 2-character codes. An example might be: ["CA-QC", "CA-ON", "US", "CZ", "IR", "CN"]

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⁸ Expiry vs RelativeExpiryInDays. Expiry takes precedence. Relative is set to lessor of (expiry, relative). Relative date is based on first unlock date.

⁹ OfflineDurationinDays vs RelativeExpiryInDays. Offline Rules. Offline is set to lessor of (offline, relative). Offline date is based on last unlock date. Relative date is based on first unlock date.

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Attributes	Description	Definition of Values
AllowCopy	Enable copy/paste function	False: not enabled True: allowed
AllowPrint	Enable the "Download to Print" toolbar button. This will download a Protected PDF with a 30-minute, one device limit and with printing enabled.	False: not enabled True: allowed
AllowWebPrint	Enable the "Print" toolbar button	False: not enabled True: allowed
DisableBookmarks	Disable/hide the Bookmark feature from the left side column	False: not enabled True: hidden
DisablePageRangePrint	Disable the print "all" and "Page range" options in the print dialog box. Only "Current page" will be enabled.	False: not enabled True: enabled
DisableSearch	Disable the Search toolbar button	False: not enabled True: hidden



Version Unique API DRM settings

While these version unique DRM settings DO NOT apply to the external service, we thought it's important to include this information here in case assumptions are made.

For the version unique API, the variable 'expiry' does nothing and the expiry date would default to 30 minutes whether an expiry value is supplied or not! The version unique access policy override settings are:

- ComputersMax
- DocumentLimit
- IpAddressesMax
- IgnoredIpAddresses
- OfflineDurationinDays
- OpenLimit
- **ExpiryInMins**
- LocationPermits
- LocationRestrictions

In the version unique API call, the field that is used to calculate an expiry date is the "ExpiryInMin", which keys of the received date or the system date that the record was added to the system. So, to grant a 90-day expiry would be $(90 * 24 * 60)$ or $(\text{NumberOfDays} * \text{HoursInDays} * \text{MinutesInHour})$ or "ExpiryInMins": 129600.

Supplying "ExpiryInMins": 2147483647 generates an expiry date that is far into the future (unlimited effectively). Specifically, it would grant 89,478,485 days which is more than a lifetime.